UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/439,416	11/13/99	GUENTHER G	0322282-0003

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WM01/0403

EXAMINER	
HARVEY, D	
ART UNIT	**PAPER NUMBER**
2643	11

DATE MAILED: 04/03/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/439,416	Guenther
Examiner	**Group Art Unit**
Dionne Harvey	2643

☒ Responsive to communication(s) filed on *Jan 30, 2001*

☒ This action is **FINAL.**

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire *3* month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) *1-20* is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-20* is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-3 and 11-13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Watkins (US 3,.838,216).

Regarding claims 1-3 and 11-13, Watkins teaches a voice coil, comprising two or more wire coils(10,16); the wire coils being directly connected in parallel with each other and being layered on top of one another(column 4, lines 11-12) for enhanced drive and field utilization in the magnetic gap(see column 2, lines 29-33).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 4,5,14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins (US 3,.838,216).

Regarding claims 4 and 14, Watkins teaches that the second wire coil is disposed about the first coil. Watkins fails to specifically that the first wire is disposed about a support. However, the Examiner takes Official Notice that the use of bobbins/wire coil supports is well known in the art and would have been obvious to one of ordinary skill in the art for the purpose of coil support.

Regarding claims 5 and 15, disclosed in column 1, lines 20-35, Watkins teaches that magnetic motors comprising a magnetic field source, is well known in the art.

3. Claims 6-9 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of Murray et al. (U.S. Patent no. 5,5 87,615).

Regarding claims 6,7,16 and 17, Watkins fails to specifically teach that the magnetic field source comprises a permanent magnet or a rare earth metal. . As disclosed in column 4, lns 10-20, Murray et al. teaches an electromagnetic force generator comprising a magnetic structure made up of two blocks of rare earth magnetic material(61,63). Murray further teaches, as seen in column 2, lns 46-55, that the permanent magnet of the device is preferably constructed of the rare earth magnetic material due to it's relatively high reluctance in relation to its coercive force and its resistance to demagnetization. It therefore, would have been obvious to one skilled in the art at

the time of the invention to incorporate the rare earth magnet of Murray et al.(U.S. Patent no. 5,587,615) into the loudspeaker construction of Watkins for the reasons previously stated.

Regarding claims 8,9,18 and 19, Watkins fails to specifically teach that the magnetic field source comprises neodymium or a neodymium boron magnet. However, the Examiner takes Official Notice that the use of neodymium boron iron magnets is well known in the art and would have been obvious to one of ordinary skill for the purpose of attaining a loudspeaker which is small, light in weight and thin while maintaining a high flux density in the magnetic gap.

4. Claims 10 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watkins in view of Murray et al. (U.S. Patent no. 5,5 87,615) as applied to claims 6-9 and 18-19, and further in view of Hastings-James (US 4,300,022).

Regarding claims 10 and 20, The combination of Watkins and Murry fails to specifically teach a magnet having a cylindrical cross-section. However, as disclosed in column 2, line 20, Hastings-James teaches that it is well known in the art to construct a magnet circuit for a speaker unit having a cylindrical cross-section.

Response to Arguments

Applicant's arguments filed 2/2/01 have been fully considered but they are not persuasive.

In response to applicant's argument that Watkins Fails to Teach Two Coils *Directly in Parallel:* The Examiner again, cites Column 4, lines 11-12 wherein Watkins teaches that coil 16 is wound *over* and *in parallel with* coil 10, as broadly claimed by the applicant. The rejection is maintained.

In response to applicant's argument that Watkins Instead Teaches Placing a First Coil in Parallel with a Resonant Circuit in Combination with an Additional Coil, Only:

The Examiner again cites column 4, lines 9-17, wherein Watkins clearly teaches that coil 10 is directly in parallel with coil 16. Coil 16 is then connected in series with resonant circuit. The fact that Watkins teaches that coil 10 is *in parallel with* coil 16, satisfies the limitations of the applicant's claims. The rejection is maintained.

In response to applicant's argument That the Operation of Watkins's Construction Is Entirely Different , a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. Otherwise, the prior art structure meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative

difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In response to applicant's argument That Watkins Fails to Teach Coils Being Connected Directly in Parallel for Enhanced Drive and Field Utilization in a Magnetic Gap.

The examiner reiterates that the intended use of the claimed invention must result in a structural difference. Furthermore, The Examiner cites column 2, lines 29-33, wherein Watkins teaches connecting the two coils in parallel "... so that the drive current from the amplifier is increased." Given that the state of the art teaches that a coil winding is located within the magnetic gap of the magnetic circuit of a speaker, Watkins does in fact teach "enhanced drive and field utilization in a magnetic gap", as claimed by the applicant. The rejection is maintained.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statements for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111. The examiner can normally be reaches on Monday through Friday from 8:30am to 6:00pm.

Any responses to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

(703) 308-6306, for formal communications for entry

Or:

(703) 308-6296, for informal or draft communications, please label "PROPOSED" or "DRAFT".

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor(Receptionist)

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached at (703) 305-4708.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne Harvey whose telephone number is (703) 305-1111.

S. Tran

SINH TRAN
PRIMARY EXAMINER

D.H.

March 29, 2001